

Ideas for integrating Energy into the Curriculum using Domains and Learning Focus Levels

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		Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Physical, Personal and Social Learning	Health and Physical Education	Improving physical health and wellbeing and decreasing fossil fuel usage by changing mode of transport to/from school; Links between organic food, better nutrition and fossil fuel consumption; Electromagnetic radiation and health; Light levels in classrooms- getting the levels right for good sight/saving energy; Walking School Bus; Ride to school/work day; Public transport challenge.					
	Interpersonal Development	Working and learning in teams; Peer leaders working with younger students to maintain energy saving systems; Understanding energy problems globally- diff cultural beliefs/behaviours; International case studies; How do we affect other countries environments? eg coal/uranium exports, Energy use and GHG emissions; Social responsibility to look after environment; Energy saving role play.					
	Personal Learning	Setting goals and managing resources; recognising and enacting appropriate values within and beyond personal context; Think Globally, Act Locally, Respond Personally; How can students positively contribute to decreased energy usage?; Use different learning centres; Guest speakers on energy topics; Tree project- growing trees for others to benefit environment.					
	Civics and Citizenship	Responsibility/rights of energy use. Turn Off day/layers day	Energy stewards / monitors in classroom	Walking school bus. Walk/ride to school day	Research a global energy issue.	Environmental protection laws/save energy campaign	Sustainable communities. Fair gvt response to climate ch'ge
Discipline-Based Learning	The Arts	Sketch auditing of school physical environment- weather	Creating songs about renewable energy, energy use at home	Interview someone on nuclear debate or islan-der about climate chge	Analysis of Australian artwork and links to weather patterns	Interpretive movement piece based on future env scenarios	Image/film based upon contemporary social justice/env issues
	English	Exposure to big books with physical environment settings	Creative story about a perfect house in the sun	CERES excursion- write text for informative RE poster & present	Conducting interviews with local community- changes in transport	Writing letter to newspaper/politician about energy issue	Debate/argumentative essay on energy issue eg nuclear, wind farms
	Humanities	*Save money by saving energy * Weather *How has cooking/heating changed over time?	*Mapping things that use energy in home	*Energy use timeline *Can we produce energy & conserve an area?eg uranium, mining or wind farm			
	Economics		*Cultural variation in energy usage e.g. indigenous vs. non indigenous	*Energy resource mapping in AUS	Consumption/ ecofootprinting	2030 trail and futurescaping	Social justice / Triple Bottom Line reports
	Geography		*Climate- how/why is it changing?	*Importance of FF in AUS development	Ecofootprint map of world countries / Kyoto countries	RE production vs. Non RE production	Energy usage and Global warming/ sea level ↑ effects
	History		*My family- childhood and transport		Melbourne transport system- how changed?	Industrial revolution and GH effect	Changing oil prices- key events. Peak Oil
	Languages Other Than English	LOTE songs/dance with enviro ed'n focus	Weather in LOTE country	Object tags, games	LOTE country energy use patterns	Climate change refugees	Diff. cultural approaches to energy sources & energy usage
	Mathematics	Weather monitoring	Weather mapping	Auditing: energy consumption. Energy use of appliances		GHG production, Energy usage, ecofootprinting	Solar energy capture, electricity generation, efficiencies
	Science	Light and sounds from batteries	How is electricity made? Energy transformation	Renewable energy, practical applications in the home	Airwatch, solar/wind systems	Fossil fuel formation; insulation, conduction, convection, radiation	Carbon Cycle, Renewable energy, hydrogen economy
Interdisciplinary Learning	Communication	Establish rules for reducing energy use at school and home	Oral presentation on different energy sources & what energy is used for	Oral presentation of informative poster or powerpoint on RE	Interpret why changes have occurred in local community (project)	Put together a political campaign using a variety of media	Produce a 4 corners style TV show to be debated by another class
	Design, Creativity & Technology	Solar gain vs. colour of material	Making model solar water or air heaters or windmill	Make a model of the earth (terrarium) to show GH effect	Model car making - solar or wind powered	Design, construct and evaluate passive solar design model house	Design brief- redesign an item to be more energy efficient (using RE)
	ICT	Save money and energy by turning off computers at night	Internet search on environmental issue e.g. GH effect, energy use	Collect data (e.g. energy use), enter onto spreadsheet & chart	Use of email/online forums to share and gain information	Create website/blog related to environmental issue/campaign	Working in a team use ICT to produce detailed project plan for tv show
	Thinking	Classification of energy sources e.g. renewable vs. non-renewable	Identify ways to reduce energy usage e.g. behaviour change	Explanation of data collected for ICT by researching topic in group	local community project explaining changes on a topic of their choice	Seek evidence support-ing opinion on a issue, assess validity of ideas	Investigate issue, analyse both sides of argument at hand, choose side